

CLAIMS

1. A method of manufacturing a secondary battery electrode having active materials on a current collector, comprising:
 - letting a computer acquire a deposition pattern for depositing a plurality of kinds of active materials, different in electric characteristic, onto discrete areas of a current collector, respectively; and
 - letting the computer allow injection nozzles to inject the plurality of kinds of active materials, as multiple particles, onto the current collector for deposition thereon, respectively, in accordance with the deposition pattern for thereby forming an active material layer.
2. The method according to claim 1, wherein the active material layer is formed by drying the plurality of kinds of active materials deposited onto the current collector.
3. The method according to claim 1, wherein the computer accesses to a memory device to read the deposition pattern stored therein for thereby acquiring the deposition pattern.
4. The method according to claim 3, wherein the computer is used and draws the deposition pattern on a display whereupon the deposition pattern drawn on the display is stored in the memory device to allow the computer to read the deposition pattern stored in the memory device for thereby acquiring the deposition pattern.
5. The method according to claim 1, wherein the deposition pattern allows the plurality of kinds of active materials to be located on the discrete areas of the current collector, respectively.
6. The method according to claim 1, wherein the deposition pattern allows the plurality of kinds of active materials to be regularly and periodically located on the discrete areas of the current collector, respectively, in an individual fashion.
7. An apparatus for manufacturing a secondary battery electrode having active materials on a current collector, comprising:
 - a computer generating a deposition pattern for depositing a plurality of kinds of

active materials, different in electric characteristic, onto discrete areas of a current collector, respectively;

a memory device storing the deposition pattern generated by the computer;

injection nozzles injecting the plurality of kinds of active materials, as multiple particles, onto the current collector, respectively, in accordance with the deposition pattern stored in the memory device; and

a heater drying the plurality of kinds of active materials deposited on the current collector, respectively.

8. The apparatus according to claim 7, wherein the computer includes an input terminal inputting information for drawing the deposition pattern, a drawing section drawing the deposition pattern based on information inputted from the input terminal, and a display providing a display of the deposition pattern drawn by the drawing section.

9. The apparatus according to claim 7, wherein the deposition pattern is configured with a plurality of graphics, using colors allocated to the plurality of kinds of active materials, respectively, of which graphics different in color are located without overlapping one another.

10. The apparatus according to claim 7, wherein the deposition pattern is configured with a plurality of graphics, using colors allocated to the plurality of kinds of active materials, respectively, of which graphics different in color are regularly and periodically located to be separate from one another.

11. The apparatus according to claim 7, wherein the injection nozzles are independently allocated to the plurality of active materials, respectively.

12. The apparatus according to claim 7, wherein the injection nozzles are independently allocated to colors of a plurality of graphics forming the deposition pattern, respectively.

13. The apparatus according to claim 7, wherein the injection nozzles include propellant containers accommodating the plurality of kinds of active materials, respectively, and the propellant containers include a heater heating the active materials.

14. A secondary battery electrode comprising:

a current collector; and

an electrode layer formed on the current collector and including a plurality of kinds of active materials, different in electrical characteristic, the electrode layer being structured such that graphics associated with the plurality of kinds of active materials, respectively, are located on discrete areas of the current collector.

5 15. The secondary battery electrode according to claim 14, wherein the electrode layers are structured such that the graphics associated with the plurality of kinds of active materials, respectively, are regularly and periodically located on the current collector.

10 16. The secondary battery electrode according to claim 14, wherein the electrical characteristic includes a characteristic exhibiting the relationship between the amount of charging and output voltage of a secondary battery formed using the plurality of kinds of active materials.

15 17. The secondary battery electrode according to claim 14, wherein the secondary battery electrode is applied to a secondary battery.

18. The secondary battery electrode according to claim 17, wherein the secondary battery is connected in series, in parallel, or in combination of series and parallel to form a battery unit.

20 19. The secondary battery electrode according to claim 18, wherein the battery unit is connected in series, in parallel, or in combination of series and parallel to form a combined battery.

25 20. The secondary battery electrode according to claim 17, wherein at least one of a battery unit, formed of the secondary battery connected in series, in parallel, or in combination of series and parallel, and a combined battery formed of the battery unit connected in series, in parallel, or in combination of series and parallel is installed on a vehicle as a power supply.